

**Notice of Allowability**

Application No.

09/820,392

Examiner

TUAN A PHAM

Applicant(s)

SINDALOVSKY ET AL.

Art Unit

2643

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/22/2005.
2. ☒ The allowed claim(s) is/are 1,3-7,9-12 and 14-23.
3. ☒ The drawings filed on 5/18/2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### **REASONS FOR ALLOWANCE**

1. Claims 1, 3-7, 9-12, and 14-23 are allowed over the prior art of record.
2. The following is an examiner's statement of reasons for allowance:

The applicant's Remarks filed on 02/22/2005 have been carefully reviewed with update search. Consequently, allowances of claims 1, 3-7, 9-12, and 14-23 are set forth in according to the applicant's remarks stated on pages 5-6.

Regarding claims 1 and 17, the prior art made of record fails to teach or suggest, the method and the arrangement of the tone detector for detecting a signal at a signaling frequency on a transmission line carrying a signaling frequencies and noise comprising: inter alias, a running maximum circuit coupled between the resonator and the comparator for determining a first largest value of the resonated signal at the output of the resonator configured in the first state during a measurement period, the first largest value being the first value, and determining a second largest value of the resonated signal at the output of the resonator configured in the second state during another measurement period, the second largest value being the second value, and a counter coupled to the running maximum circuit and the controller for determining the measurement periods, in combination with other limitations, as substantial described and connected to the independent claims 1 and 17.

Regarding claim 7, the prior art made of record fails to teach or suggest, the arrangement of a tone detector for detecting a signal at a signaling frequency on a

transmission line carrying a signaling frequencies and noise comprising, inter alias, an accumulator having a first input for receiving the communication signal, a first feedback input, a second feedback input, and an output for outputting the resonated signal, a first delay element having an input coupled to the output of the accumulator and an output, the first delay element introducing a first delay to the resonated signal, a first feedback path coupled between the output of the first delay element and the first feedback input of the accumulator, the first feedback path comprising a multiplier configurable by the state machine for multiplying the delayed resonated signal by a coefficient, a second delay element having an input coupled to the output of the first delay element and an output, the second delay element introducing a second delay to the delayed resonated signal, and a second feedback path coupled between the output of the second delay element and the second feedback input of the accumulator, in combination with other limitations, as substantial described and connected to the independent claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is

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(703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

**IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


Or faxed to: (703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 14, 2005  
Examiner

Tuan Pham



**BINH TIEU**  
**PRIMARY EXAMINER**